Neither the worms nor the larvae are transmitted person to person, and the worms can only reproduce in their human hosts.

Donald Hopkins, who retired as deputy director of the National Centers for Disease Control and Prevention and is now with former President Jimmy Carter's private health program, Global 2000, has waged a quietly effective, personal campaign against the disease for many of the past 25 years.

Hopkin's eradication strategy includes two simple but remarkably effective objectives. First, all persons in epidemic areas are given fine mesh cloth and taught to filter their drinking water. Second, health education programs are implemented to encourage persons to stay away from the community water supply when the worms are emerging from their bodies. As a result of this approach the number of persons newly infected with guinea worm has decreased from about one million per year to a few hundred thousand per year over the past three years. If the present trend in disease incidence continues, the disease will be eradicated within three to five years.

Former President Carter has helped raise over \$40 million in contributions from a variety of sources to support the eradication campaign. He also visited epidemic areas in eastern Africa in August to call attention to the international effort. Carter's prestige and influence in developing nations have lent importance and credibility to the guinea worm eradication effort among high-level government officials and among the residents of the epidemic areas.

If the project is successful, a low-technology, environmental public health intervention strategy will be responsible for the eradication of one of the most gruesome parasitic diseases known.

EPA Nominations Made

President Clinton has made nominations to fill key assistant administrator positions in the program offices at the Environmental Protection Agency. After the candidates are confirmed by the Senate, they will manage the implementation of the categorical environmental protection activities defined in federal law.

Lynn Goldman has been nominated as assistant administrator for prevention, pesticides, and toxic substances. Goldman, a toxicologist with the California Department of Health Services, will manage EPA's programs in pollution prevention, pesticides, and toxics programs. Toxics programs include the activities authorized under the Toxic Substances Control Act and Federal

Insecticide, Fungicide, and Rodenticide Act. Goldman served as a counselor to the National Toxicology Program.

Mary Nichols, an attorney with the National Resources Defense Council in Los Angeles, has been nominated as assistant administrator for air and radiation. She will manage the implementation of the Clean Air Act amendments, the radon and other radia-

tion programs, and the indoor air pollution control activities at EPA. Nichols was California Secretary of Environmental Affairs and chair of the California Air Resources Board from 1979 to 1982.

Robert Perciasepe has been nominated as assistant administrator for water. Perciasepe, Secretary for the Environment in Maryland, will manage the EPA programs authorized by the Clean Water Act and the Safe Drinking Water Act. These federal statutes are

due to be reauthorized by Congress and have major impacts at the state and local levels.

Harold E. Varmus-Nobel Prize

winner seeks change for NIH.

The nominee for assistant administrator for solid waste and emergency response is Elliot Laws, an attorney in private practice in Washington, DC, will administer the Superfund hazardous waste program and the federal activities related to the disposal of municipal solid waste. The Superfund Program has been widely criticized by community groups, industry, and environmentalists and is scheduled for reauthorization in the next session of Congress. Laws has considerable federal experience as a litigator in the Department of Justice Land and Natural Resources Division from 1985 to 1987 and in the Office of Enforcement and Compliance Monitoring at the EPA.

Bailus Walker has withdrawn his candidacy for assistant administrator for Research and Development. Walker, dean of the School of Public Health at the University of Oklahoma, cited unreasonably long delay in the nomination and clearance process and his commitment to the university in the letexplaining his withdrawal. Administration officials have not yet proposed another candidate, and it is not known when an administrator of this important program office that manages the engineering and health research activities for EPA will be named.

New NIH Director

Harold Varmus, a cell biologist from the University of California at San Francisco, was nominated by President Clinton on August 4 to direct the National Institutes of Health. In announcing the nomination, Secretary of Health and Human Services Donna Shalala described the appointment as "absolutely first rank."

As the director of NIH, Varmus will manage the largest and most complex biomedical research effort in the world. The NIH is made up of 24 institutes, centers,

and divisions. Among these are the National Cancer Institute, the National Institute of Allergy and Infectious Diseases, and a clinical center at its 300-acre headquarters in Bethesda, Maryland, and the National Institute of Environmental Health Sciences in Research Triangle Park, North Carolina. The NIH has about 15,000 employees and an annual budget of about \$11 billion. Approximately 80% of the NIH budget supports research and training grants to scientists throughout the United States.

American preeminence in medicine and human biology and physiology is attributed largely to the NIH program of extramural research grants and intramural science that have been developed over the past 40 years.

Varmus takes over NIH at a critical period. Each week brings a report of major new findings in the fundamental mechanisms of disease and in the treatment of previously intractable conditions. But even as these achievements are announced, NIH is not prospering as it has in the past. Traditionally, Congress exempted the NIH from budget cuts often exacted on other domestic programs. In the 1980s, the NIH budget increased dramatically; in the past two years this trend has not continued. The NIH appropriation has not kept pace with inflation. Thus, the number of new grant applications funded by NIH has not grown, and university-based scientists are frustrated by the fact that their research proposals receive high marks in peer review yet are not funded by NIH. Support for fundamental, nontargeted research, long a staple of the NIH grant system, has decreased as NIH is pressed to be more responsive in applying research to the resolution of the immediate health needs of victims of AIDS and of women, the elderly, and the poor. Allegations of scientific fraud on the part of a few NIH and NIH-supported researchers and recent reports of sexual harassment and failure to promote minorities and women have eroded some of the public's confidence in science and in the management of NIH.